



1
00:00:13,009 --> 00:00:10,190
robotic spacecraft from NASA's Jet

2
00:00:15,589 --> 00:00:13,019
Propulsion Laboratory explore our solar

3
00:00:20,000 --> 00:00:15,599
system and beyond

4
00:00:22,339 --> 00:00:20,010
the twin rovers examining mars the

5
00:00:25,760 --> 00:00:22,349
Cassini spacecraft touring Saturn and

6
00:00:35,090 --> 00:00:25,770
many other JPL missions continue to

7
00:00:35,930 --> 00:00:35,100
unlock scientific mysteries but early in

8
00:00:41,060 --> 00:00:35,940
the Cold War

9
00:00:43,220 --> 00:00:41,070
JPL built missiles for the army that all

10
00:00:46,220 --> 00:00:43,230
changed with the Soviet Union's first

11
00:00:49,610 --> 00:00:46,230
scientific satellite Sputnik one

12
00:00:52,040 --> 00:00:49,620
launched the space race today a new moon

13
00:00:57,290 --> 00:00:52,050

is in the sky a 23 inch metal sphere

14

00:00:58,700 --> 00:00:57,300

placed in orbit by a Russian rocket you

15

00:01:00,290 --> 00:00:58,710

are hearing the actual signals

16

00:01:02,360 --> 00:01:00,300

transmitted by the earth circling

17

00:01:07,100 --> 00:01:02,370

satellite one of the great scientific

18

00:01:09,260 --> 00:01:07,110

feats of the age but we were very

19

00:01:11,120 --> 00:01:09,270

disappointed but when the first one was

20

00:01:13,490 --> 00:01:11,130

launched because we knew damn well that

21

00:01:16,609 --> 00:01:13,500

we could launch a satellite in time we

22

00:01:18,469 --> 00:01:16,619

were told to Eisenhower finally came to

23

00:01:23,090 --> 00:01:18,479

understand that the only way to

24

00:01:24,649 --> 00:01:23,100

tranquillize the nation was to give the

25

00:01:27,830 --> 00:01:24,659

American people a satellite

26

00:01:30,499 --> 00:01:27,840

even though JPL had a rocket nearly

27

00:01:34,280 --> 00:01:30,509

ready to launch the Navy's Vanguard

28

00:01:36,200 --> 00:01:34,290

project was chosen instead America's

29

00:01:38,179 --> 00:01:36,210

first attempt to launch a satellite a

30

00:01:39,920 --> 00:01:38,189

six and a half inch sphere weighing just

31

00:01:42,260 --> 00:01:39,930

over three pounds was checked out by

32

00:01:44,060 --> 00:01:42,270

scientists and declared ready a great

33

00:01:46,249 --> 00:01:44,070

wave of advance publicity focused

34

00:01:48,050 --> 00:01:46,259

attention at Cape Canaveral Florida for

35

00:01:50,300 --> 00:01:48,060

the launching of test vehicle three a

36

00:01:53,240 --> 00:01:50,310

project Vanguard what happened is

37

00:02:09,010 --> 00:01:53,250

already unhappy history another setback

38

00:02:14,840 --> 00:02:11,750

the whole world goes nuts I mean they

39

00:02:17,660 --> 00:02:14,850

didn't you know you know flop Nick and a

40

00:02:19,520 --> 00:02:17,670

you know excuse Nick and there's just

41

00:02:22,880 --> 00:02:19,530

all these mocking headlines and there's

42

00:02:28,190 --> 00:02:22,890

this huge huge failure to have the

43

00:02:32,960 --> 00:02:28,200

communists in technology to pioneer a

44

00:02:36,960 --> 00:02:32,970

new frontier of infinite size the

45

00:02:42,900 --> 00:02:39,930

under enormous pressure President

46

00:02:46,580 --> 00:02:42,910

Eisenhower gives JPL and the army the

47

00:02:49,220 --> 00:02:46,590

go-ahead to build and launch Explorer 1

48

00:02:53,460 --> 00:02:49,230

this is what they've been waiting for

49

00:02:55,680 --> 00:02:53,470

the deadline is 90 days 90 days to put a

50

00:02:58,290 --> 00:02:55,690

satellite into orbit minutes

51
00:02:59,940 --> 00:02:58,300
click fast relentlessly the beams of

52
00:03:02,160 --> 00:02:59,950
powerful searchlights light up the

53
00:03:04,740 --> 00:03:02,170
missile truly the star of one of the

54
00:03:06,600 --> 00:03:04,750
greatest suspense dramas of our time the

55
00:03:09,300 --> 00:03:06,610
drama approaches the final act the

56
00:03:14,640 --> 00:03:09,310
Army's first attempt to fire a man-made

57
00:03:18,510 --> 00:03:14,650
moon into orbit time late evening Friday

58
00:03:38,820 --> 00:03:18,520
January 31st 1958 in a blockhouse Atkin

59
00:03:47,130 --> 00:03:43,410
we got a report from the Cape that the

60
00:03:49,950 --> 00:03:47,140
launch looks pretty good and it should

61
00:03:52,530 --> 00:03:49,960
fly over California and such a time and

62
00:03:56,250 --> 00:03:52,540
so the decision was made that we would

63
00:03:59,070 --> 00:03:56,260

make no public announcements about the

64

00:04:02,760 --> 00:03:59,080

rocket until it had actually been picked

65

00:04:05,130 --> 00:04:02,770

up in California and so we sat there for

66

00:04:09,150 --> 00:04:05,140

an hour and a half the time came and

67

00:04:11,010 --> 00:04:09,160

went and there was a period of that is a

68

00:04:13,290 --> 00:04:11,020

period of eight minutes there which of

69

00:04:17,009 --> 00:04:13,300

the long statements overspent in my life

70

00:04:19,259 --> 00:04:17,019

Explorer one finally signal and went on

71

00:04:22,230 --> 00:04:19,269

to discover the existence of radiation

72

00:04:25,770 --> 00:04:22,240

belts around the earth because of this

73

00:04:28,110 --> 00:04:25,780

of these belts we are able to survive it

74

00:04:31,950 --> 00:04:28,120

has dominated the way in which we

75

00:04:34,500 --> 00:04:31,960

pursued our science since that time the

76

00:04:38,970 --> 00:04:34,510

success of Explorer and what we learned

77

00:04:41,760 --> 00:04:38,980

from it really does kind of recreate in

78

00:04:43,740 --> 00:04:41,770

the in the most fundamental way the

79

00:04:47,130 --> 00:04:43,750

nature of the of the Jet Propulsion lab

80

00:04:49,680 --> 00:04:47,140

and moving it from a rocket development

81

00:04:52,530 --> 00:04:49,690

center to one in which space science

82

00:04:55,279 --> 00:04:52,540

becomes what it really does it really